ON THE HISTORY AND PROGRESS

OF

OVARIOTOMY IN GREAT BRITAIN,

WITH

OBSERVATIONS FOUNDED ON PERSONAL EXPERIENCE OF THE OPERATION IN FIFTY CASES.

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ALTHOUGH many learned arguments have been held as to the precise nature of the operation alluded to by Athenæus, Galen, and other ancient writers, as the CASTRATION OF WOMEN, and much time has been wasted in disputes as to the meaning of some passages which lead to the belief that, in many of the cases alluded to, the operation consisted in *infibulation* of the external parts, and as to the meaning of other passages which would seem to imply that by this *castration* was meant extirpation of the uterus—although some writers believed that the ovaries of women had been removed by barbarians at various historical periods—although Pott and other surgeons had removed ovaries when protruded from the abdomen and forming part of hernial tumours—and although *gelding* or *spaying* had long been practised on various domesticated animals, the fact that healthy ovaries had been removed did not suggest the idea that diseased ovaries might be extirpated until a late period in the History of Surgery.

Two or three passages might be quoted from writers of the seventeenth century, to prove that the idea of extirpating ovarian cysts had suggested itself, but that it had been regarded as too perilous to be justifiable; and it is to the British School of Medicine, and especially to the teaching of William Hunter and of John Bell, that the actual performance of the operation of ovariotomy is to be traced.

In Dr. William Hunter's paper "On the Cellular Tissue," published in 1762, in the second volume of the 'Medical Observations and Inquiries,' after stating that the trochar is almost the only palliative in the treatment of ovarian dropsy, he says—"It has been proposed, indeed, by modern surgeons, deservedly of the first reputation, to attempt a radical cure by incision and suppuration, or by excision of the cyst." Then, in support of his opinion, that "excision can hardly be attempted," he asks, "must not the wound made in the belly for the excision of the cyst or cysts be large enough to admit the surgeon's whole hand? Must it not be often a good deal larger; as when the tumour is large and composed of a number of bags filled with jelly? Would not such a wound be attended with a good deal of danger from itself? Would it not be very difficult to cut the *peduncle*, or root of the *tumour*, with one hand only introduced? Would it not be impossible to do this where the adhesions proved to be considerable? Would there not be great danger of wounding the intestines? If any considerable branch of the spermatic artery should be opened, what could the surgeon do to stop the bleeding? If it be proposed, indeed, to make such a wound in the belly as will *admit two fingers or so*, and then to *tap the bag and draw it out*, so as to bring its root or peduncle *close to the wound of the belly*, that the surgeon may cut it without introducing his hand; *surely in a case otherwise so desperate it might be advisable to do it*, could we beforehand know that the circumstances would admit of such treatment." (Op. cit., p. 45.)

John Bell never performed ovariotomy; but an American (born in Virginia, practising in Kentucky), Dr.

Ephraim McDowell, who attended Bell's course of lectures in Edinburgh, in 1794, is said by his biographer, Dr. Gross, to have been "enraptured by the eloquence of his teacher, and the lessons which he imbibed were not lost upon him after his return to his native country. Mr. Bell is said to have dwelt with peculiar force and pathos upon the organic diseases of the ovaries, speaking of their hopeless character when left to themselves, and of the possibility, nay practicability, of removing them by operation. . . . . It is not improbable that the young Kentuckian, while listening to the teaching of the ardent and enthusiastic Scotchman, determined in his own mind to extirpate the ovaries in the first case that should present itself to him after his return to his native country. The subject had evidently made a strong impression upon him, and had frequently engaged his attention and reflection. He had thoroughly studied the relations of the pelvic viscera in their healthy and diseased conditions, and felt fully persuaded of the practicability of removing enlarged ovaries by a large incision through the wall of the abdomen." (Gross, 'Lives of eminent American Physicians and Surgeons,' pp. 209-212.)

Dr. McDowell returned to Kentucky in 1795, and commenced practice at once; but it was not until fourteen years afterwards that he was consulted, in 1809, by a Mrs. C—, who became the first subject of ovariotomy, and who survived in good health until 1841, and died after the completion of her seventy-eighth year.

It is quite certain that this is the first case of ovariotomy on record; for the operation of L'Aumonier, of Rouen, in 1776, which has been referred to as one of ovariotomy, was performed in a case of pelvic abscess, which he opened by an incision through the wall of the abdomen above Poupart's ligament, six or seven weeks after parturition. He seems also to have separated the fimbriæ of the Fallopian tube from the sac of the abscess, and to have removed the ovary without any necessity, and without any idea of ovariotomy. His case may be found recorded in the 'Mémoires de la

Société Royale de Médecine' for 1782. Another case, included in some of the tables of ovariotomy, by Professor Dzondi, is one in which a pelvic tumour was cured by drawing out a cyst through an incision in the abdominal wall of *a boy* twelve years old.

These are the only two cases which have been brought forward in opposition to Dr. McDowell's claim to have been the first to perform the operation of ovariotomy. His claim, therefore, is unquestionable. He followed up his first case by others. There is some uncertainty as to the precise number, but there is evidence to prove that between 1809 and 1820 he had seven cases, six of which were successful. In six subsequent cases he seems to have been less fortunate. He performed the operation thirteen times altogether, between 1809 and his death in 1830. The precise number of *deaths* cannot be ascertained, but of *eight cures* there can be no doubt. Dr. Gross does not give the exact date, but he says that Dr. McDowell was induced, by the debt of gratitude which he owed to John Bell, to draw up an outline of his cases, and to send a copy of his paper to the celebrated Scotchman, as "an exhibition of the exploits of his pupil in the execution of an operation, the practicability of which he had been at so much pains to teach in his lectures." (Op. cit., p. 216.)

Bell died before this paper arrived in Edinburgh, but it fell into the hands of Mr. Lizars, who published it seven years afterwards, in the thirty-second volume of the 'Edinburgh Medical and Surgical Journal.'

Suggested by William Hunter—advocated by John Bell—first practised by an American pupil of John Bell—Ovariotomy is an operation of British origin, and it is to the labour of British surgeons that its subsequent progress is chiefly due.

Mr. Lizars, of Edinburgh, was the first to attempt the operation in this country. In 1823 he laid open the abdomen of a woman, twenty-nine years of age, who was supposed by several eminent physicians to suffer from ovarian disease. But it was proved that the abdominal enlarge-

ment was due only to tympanites and obesity. Mr. Lizars published a full account of this case, and I have received information respecting it from two gentlemen who were present—Dr. Knox, and Dr. Boulton, of Horncastle. The chief interest of the case rests in the illustration it affords of the ignorance of physical diagnosis forty years ago. The patient recovered from the operation. In 1825, Mr. Lizars operated twice. The first case was considered to be successful, as one large ovarian tumour was removed, and the patient recovered; but the other ovary was found to be diseased, and was not disturbed on account of the adhesions. In the second case, a solid ovarian tumour, which weighed seven pounds, was removed; but death followed in fifty-six hours, from peritonitis. In the same year Mr. Lizars fell into another error of diagnosis, and opened the abdomen only to find a large uterine tumour; but the patient recovered, and lived twenty-five years afterwards.

The first attempt to perform ovariotomy in London was made by Dr. Granville, in 1827. He operated in two cases. In one the operation was abandoned on account of the extent of the adhesions; the woman recovered. In the other case a fibrous tumour of the uterus, weighing eight pounds, was removed; but the patient died on the third day.

The ill success of Mr. Lizars and Dr. Granville—who both operated by the long incision, Mr. Lizars laying open the abdomen from the sternum to the pubes, and Dr. Granville making incisions nine or ten inches long—brought discredit upon the operation; and it was not until 1836, nine years after Dr. Granville's failures, that a provincial surgeon, Mr. Jeaffreson, of Framlingham, acted upon the suggestion of William Hunter, and performed ovariotomy by the small incision for the first time in Great Britain. A bilocular cyst was removed through an opening only an inch and a half long. The patient was alive in 1859, was fifty-six years of age, and had given birth to one boy and three girls after the operation.

In the same year (1836), another provincial surgeon,

Mr. King, of Saxmundham, successfully removed an ovarian cyst through an incision only three inches long; and Mr. West, of Tonbridge, also had a successful case, the incision being only two inches long. In 1838 Mr. Crisp, of Harleston, in Suffolk, removed a multilocular cyst through an incision only one inch long. The patient lived fifteen years after the operation, and enjoyed good health.

In 1839 Mr. West, of Tonbridge, had a second successful case; a single cyst, which had contained twenty-four pints of fluid, having been removed by the short incision. Mr. West also had an unsuccessful case of completed ovariotomy, and one in which the adhesions prevented the completion of the operation. In the same year, 1839, the first attempt to perform ovariotomy of which I have been able to find any record in a London hospital, was made at Guy's, by Mr. Morgan; a small incision was made, adhesions were found, the tumour was not removed, and the patient died in forty-eight hours.

In 1840 Mr. Benjamin Phillips operated at the Marylebone Infirmary, and completed the operation for the first time in London; but the result was unsuccessful.

In 1842 Dr. Clay, of Manchester, commenced his long series of operations, performing ovariotomy four times, and in three out of the four with success. In 1843 he also operated four times, twice successfully. In 1843 Mr. Aston Key removed both ovaries from a patient in Guy's Hospital. His incision extended from the ensiform cartilage to the pubes, and death followed on the fourth day. Later in the same year, Mr. Bransby Cooper operated in the same hospital by the long incision, and removed a large multilocular cyst; but the patient died on the seventh day.

So that twenty years ago, although ovariotomy had been performed with very qualified success in one case in Scotland, and in at least ten cases with complete success by surgeons in our own provinces, it had never been performed successfully in London. It was the good fortune of Mr. Walne to perform the first successful operation in London in November, 1842; and he had two other successful cases in

May and September, 1843. In that year, and in 1844, Dr. Frederic Bird had three, and Mr. Lane two, successful cases. Mr. Lane's first patient is still alive, and has had five children. In 1843 and 1845, Mr. Southam, of Salford, and in 1845 Mr. Dickson, of Shrewsbury, published successful cases. In 1846 Mr. H. E. Burd had a case which is published in the thirtieth and thirty-second volumes of the 'Transactions' of this Society, the patient having recovered, and had a child two years after operation.

In the same year Mr. Solly assisted materially in the progress of ovariotomy, by pointing out one of the causes of danger, and the means of avoiding it; taking advantage of an unsuccessful case which occurred in his practice at St. Thomas's Hospital, to teach his pupils and professional brethren that retraction of the pedicle behind the ligature is very likely to occur, and to lead to fatal hæmorrhage, unless prevented by great care. His clinical lecture published in the 'Medical Gazette,' in 1846, contains a masterly review of the arguments for and against the operation, which must have had considerable effect upon the mind of the profession at the time.

The year 1846 is also noteworthy in the history of ovariotomy, as in that year Mr. Cæsar Hawkins performed the operation successfully in St. George's Hospital, this being the first successful operation by a surgeon of any of our metropolitan hospitals. But Mr. Hawkins did not repeat the operation, and his example was not followed by others, for several years; Dr. F. Bird and Mr. Lane being the only operators in London, except Dr. Protheroe Smith, who had a successful case, although Dr. Clay continued his operations at Manchester, and successful cases were recorded by Dr. Elkington, of Birmingham, and by Mr. Crouch in 1849, and by Mr. Cornish, of Taunton, and Mr. Day, of Walsall, in 1850.

In 1850 Mr. Duffin inaugurated a new era in ovariotomy, by pointing out the danger of leaving the tied end of the pedicle to decompose within the peritoneal cavity, and by insisting upon the importance of keeping the strangulated

stump outside. He acted up to this principle in a case which was published in the thirty-fourth volume of the 'Transactions' of this Society.

Up to the publication, in 1851, of that volume of the 'Transactions,' the papers on ovarian disease which had appeared in them must have had an influence decidedly unfavorable upon the progress of the operation in Great Britain. A paper by Mr. Benjamin Phillips, published in 1844, exhibited in a tabular form "the results of 81 operations performed for the purpose of extracting ovarian tumours. In 61 cases the tumour was extracted; in 15 cases, adhesions, or other circumstances, prevented its removal. Of the cases in which the operation was completed, the tumour being extracted, 35 terminated favorably; the patients recovered. In 26 instances the termination was unfavorable; the patients died." This result of only 35 cures out of 81 operations, was doubtless discouraging to the profession, although Mr. Phillips discussed the important question "whether the extraction of ovarian tumours shall be classed among the benefits conferred by science upon man," in the most calm and philosophical spirit, calculated to "moderate exaggerated expectations on the one hand, and exaggerated fears on the other." He showed that ovariotomy, though a grave and dangerous operation, was proved by the results to be far less so than ligature of the innominata, and other operations which had been at once admitted into practice; and he proved that the existence of adhesions had not so far lessened the proportion of recoveries as to become a bar to the performance of the operation, and that the short had led to better results that the long incision.

In 1850 Dr. Robert Lee also brought a table of cases of ovariotomy before this Society. It was published in 1851, in the same volume of the 'Transactions,' with Mr. Duffin's memorable case. According to Dr. Lee's table, of 162 cases in which the operation had been attempted or performed in Great Britain, "in 60, the ovarian disease could not be removed; 19 of these proved fatal. Of the

remaining 102 cases in which the operation was completed, 42 terminated fatally." Sixty cures out of 162 cases was felt to be a very unsuccessful result, and the profession were still further discouraged by repeated assertions, which were never satisfactorily answered, that some operators had not published all their fatal cases. The discussion which took place in this Society, on the 12th November, 1850, after Mr. Duffin's case and Dr. Lee's paper had been read, tended to throw great discredit upon the operation. Mr. Cæsar Hawkins asserted the prevalence of a belief that "many of the operations have been fatal, or have been impossible of completion, of which the public have no information." He stated that the operation had been attempted by ten surgeons attached to hospitals in London, that not one of these gentlemen had performed it twice, and that the only successful case of the ten was his own. He also drew from Dr. Frederic Bird the admission that, in addition to thirteen cases in which he had extirpated large ovarian tumours, in one case the tumour could not be removed, and in eighteen other cases he had made exploratory incisions; so that, although not one of these eighteen patients was injured by the incisions, there were only nine cures, or successful cases, out of thirty-two operations. The fact that such a result was possible in the practice of a man of great experience became a serious impediment to the progress of ovariotomy. It led to a common belief, not yet overcome, that we have no means of determining whether an ovarian tumour can or cannot be removed, without the prelude of an exploratory incision; and no one who reads the reports of that memorable discussion in the medical journals of the year can wonder that one of the oldest, ablest, and most experienced Fellows of the Society—Mr. Lawrence—assuming that "share of responsibility which high reputation imposes upon its possessor"—should have closed the debate by the question whether the attempts at treating diseased ovaries by surgical operation "can be encouraged and continued without danger to the character of the profession?"

Nor is it surprising that during the next seven years the operation was regarded very unfavorably by the profession. Dr. Clay continued to operate at Manchester; but as his cases were not brought before this or other influential societies, and as his operations were not performed in an hospital before numerous witnesses, his example had but a very limited influence,—while his adherence to the long incision maintained the dread with which the operation was regarded, both by the profession and the public, long after chloroform had done so much to lighten apprehension, to abolish pain, and to lessen shock. Here and there an occasional case was recorded; Mr. Beale, of Halesworth, had a successful case by the small incision a fortnight after the memorable debate in this Society; but Dr. Bird himself either ceased to operate or to report his cases. In 1852 Dr. Tanner had a successful case, and a second in 1853. In the same year (1853) Mr. Borlase Childs and Mr. Erichsen had each one successful case. In 1855, Mr. Garrard, of Halesworth, had another; and in 1857, Mr. Humphry, of Cambridge, and Mr. Hunt, of Ashton-under-Lyne, had each a successful case. Between his first case in 1852, and 1856, Mr. Baker Brown operated on nine patients; but his results were so disastrous, seven of the nine patients having died, that the operation fell into still greater disrepute; and when I returned from the East after the Crimean war, and resumed my duties as Surgeon of the Samaritan Hospital, ovariotomy was at a very low ebb in the opinion of the profession. We had been told in our most influential review, that the operation was one which "though it may excite the astonishment of the vulgar, calls neither for the knowledge of the anatomist nor the skill of the surgeon," and that whenever an operation was performed "so fearful in its nature, often so immediately fatal in its results, a fundamental principle of medical morality is outraged." In some of the most recent surgical works the operation was not even alluded to. In the best works on the diseases of women it was condemned. No successful case had occurred in Scotland since Mr. Lizars' partial success in

1825. The operation had never been performed in Ireland. In London, Mr. Walne, Mr. Lane, and Dr. F. Bird had either ceased to operate or to publish their cases; Mr. Baker Brown had not operated for more than two years; and Mr. Cæsar Hawkins' was still, after twelve years, the only successful operation which had been performed in any of our large metropolitan hospitals.

Several cases of ovarian disease fell under my notice in 1857, and I became strongly impressed by the inutility of palliative treatment, by the miserable end of some patients who died worn out by the ordinary progress of the disease, and by the danger of iodine injections. This led me, in December, 1857, after carefully considering the evidence adduced for and against ovariotomy, to put the operation to the test of personal experience, pledging myself to make the results fully known to the profession. My first attempt was not encouraging. Finding intestines in front of the tumour, I was induced to close the wound without proceeding further, on the representation that the tumour could not be ovarian. The patient recovered well, but died four months afterwards from spontaneous rupture of a cyst into the peritoneal cavity, and I had the mortification to find that the tumour might have been easily removed.

The three following cases were successful; the first was in February, 1858. The tumour was exhibited at the Pathological Society; the case was fully reported in the 'Medical Times;' and more than one writer has traced to that case the commencement of what has been termed on the continent the "revival of ovariotomy in England." My fifth case, or fourth case of completed ovariotomy, was fatal. These five cases formed the subject of a paper which was read before this Society in February, 1859. As it does not appear in the 'Transactions,' and as a short abstract only appears in the 'Proceedings,' I may state here that I entered very fully into the question as to the principle of the operation, in the hope of eliciting the opinion and counsel of some of the most influential and experienced Fellows of the Society; and I also discussed minutely the

causes of the mortality, and the means by which we might hope to reduce it, insisting especially—

That the incision should not be needlessly long.

That the peritoneal cavity should be kept free from ovarian fluid.

That the cyst should not be cut away so near the ligature on the pedicle as to permit of the ligature slipping.

That the strangulated end of the pedicle should be kept outside the abdominal cavity.

That in uniting the wound two opposed surfaces of perineum should be fastened together.

That opium had been used much too freely in the after treatment. And lastly,

That pure air, perfect cleanliness, complete quiet, and the undivided attention of a nurse—all conditions unattainable in the general wards of a large hospital—are conditions necessary to success.

Mr. Hutchinson was the first to follow up ovariotomy in 1858. He had two successful cases in that year; and he assisted very materially in the progress of the operation by making his cases well known, and by the introduction of the clamp as a ready means of securing the pedicle and fixing it on the abdominal wall. Mr. Baker Brown, after an interval of more than four years since his second and last successful case, recommenced operating, and had two successful cases in 1858, and two in 1859; but six fatal cases in the practice of the same operator in 1859, somewhat retarded the progress of ovariotomy in the favorable opinion of the profession.

In order to give the fullest opportunity for scrutinising the details of every case, I brought every tumour which I removed before the Pathological Society; and I afforded the hospital reporters of the various medical journals every facility for obtaining notes of the cases. I also invited many of the most distinguished practitioners of the day to witness the operations, and to see the patients afterwards, both in hospital and private practice. Among those who

accepted the invitations were—Messrs. Nélaton and Démarquay, of Paris; Schuh, of Vienna; Porta, of Pavia; Vanzetti, of Padua; De Toca, of Madrid; Gurlt, of Berlin; Koepl, of Brussels; Marion Sims, of New York; Simpson, of Edinburgh; Pirrie, of Aberdeen; Gordon, of Dublin; Buchanan and Macleod, of Glasgow; Clay, of Birmingham; Bickersteth and Grimsdale, of Liverpool; Roberton, Roberts, and Whitehead, of Manchester; Hey, of Leeds; as well as Messrs. Fergusson, Paget, Bowman, Curling, Adams, Holden, Hulke; and Drs. West, Priestley, Tyler Smith, Robert Lee, and very many other professional friends of this and other countries. By this course I tried to induce the most influential men among us to examine the question for themselves; and I believe a great deal of the feeling against the operation was removed. I know that many gentlemen who came as spectators, having previously strongly objected to the operation, have since performed it successfully.

I brought the subject again before this Society in 1859, when three cases of tetanus occurred in my practice within one month, two of them after ovariotomy. A considerable portion of that paper may be found in the 'Proceedings' for the session 1859-1860.

It appears to be unnecessary to trace the progress of ovariotomy during the last three years, as in 1860 Mr. Clay, of Birmingham, published as an appendix to his translation of Kiwisch 'On the Diseases of the Ovaries,' fuller and more accurate statistical information as to the results of ovariotomy than exist in any language respecting any surgical operation. This work had a marked influence in hastening the progress of ovariotomy in Great Britain; and since its publication the operation has been repeatedly performed, and with a very encouraging amount of success, in London, Liverpool, Leeds, Birmingham, and Manchester; while within the present year successful cases have been met with in three of the large general hospitals of this metropolis—the London, Guy's, and the Middlesex. It has not yet been done successfully in Ireland; but two successful cases have been done in Scotland.

I do not now refer to the conclusions which Mr. Clay deduces from his careful and elaborate researches, because the oft-repeated objection may be raised that some operators have not made known all their unsuccessful cases. But, as 50 cases of one operation in the hands of one operator seem to afford a tolerably fair test of the success of the proceeding, I have arranged in a table the result of my whole experience, classing the cases in three series—

I. Of 50 cases in which the operation was completed.

II. Of 3 cases in which it was commenced but not completed. And

III. Of 3 cases in which a small incision was made in aid of diagnosis, or as an auxiliary to tapping.

Table of Cases of Ovariotomy in Great Britain.

SERIES I.—In which Ovariotomy was completed—50 cases: 33 recoveries; 17 deaths.
II. „ „ was commenced, but not completed—3 cases. No death from the operation.
III. „ an exploratory incision was made in aid of diagnosis—3 cases. 1 death.

SERIES I.—*Fifty Cases in which Ovariotomy was completed.*

No.	Date.	Age.	Condition.	History, &c.	Result.
1	1858. Feb.	29	Unmarried	Had been tapped seven times and injected with iodine twice. Multilocular, 26 lbs.	Remains quite well.
2	Aug.	38	Married	Had been tapped three times. Multilocular cyst, 31 lbs.	Remains quite well.
3	Nov.	33	Married	Never tapped. 57 lbs. of ascitic fluid removed. 23 lbs. pseudo-colloid ovarian tumour	Recovered, and remained well for some months, but died ten months afterwards of cancer of peritoneum.
4	1859. Jan.	39	Unmarried	Pseudo-colloid tumour, 10½ lbs.	Died thirty-two hours after operation.
5	May	43	Married	Pseudo-colloid tumour, 10 lbs., surrounded by six gallons of ascitic fluid	Remains well.
6	June	29	Married	Fibrous and cystic tumour, 7½ lbs., surrounded by ascitic fluid	Died on second day.
7	June	29	Unmarried	Tapped twice. Multilocular	Recovered.
8	July	47	Married	Often tapped. Both ovaries removed	Recovered, and remained well two years, and then died of hemiplegia.

No.	Date.	Age.	Condition.	History, &c.	Result.
9	1859. Oct.	41	Married	Tapped twice. Multilocular cyst, 38 lbs.	Remains well. Had a child thirteen months after operation.
10	Oct.	37	Unmarried	Multilocular cyst, 19 lbs.	Died on the fourth day.
11	Oct.	29	Unmarried	Multilocular, 42 lbs.	Remains well.
12	Oct.	38	Married	Tapped twice. Multilocular, 53 lbs.	Died, on the ninth day, of tetanus.
13	Nov.	17	Unmarried	Tapped eight times. Multilocular, 38 lbs.	Remains well.
14	Dec.	27	Unmarried	Tapped nine times. Multilocular, 54 lbs.	Died twenty-three hours after.
15	1860. Jan.	23	Unmarried	Tapped twice. Multilocular, 25 lbs.	Remains well.
16	Feb.	26	Married	Tapped twice. Multilocular, about 25 lbs.	Died thirty hours after.
17	Feb.	33	Married	Tapped five times. Multilocular, 31 lbs.	Died, forty-six hours after, of intestinal obstruction by pedicle.
18	July	41	Married	Multilocular cyst, about 26 lbs.	Remains well.
19	July	36	Unmarried	Multilocular, about 24 lbs.	Remains well.
20	Oct.	53	Married	Very large multilocular, more than 50 lbs.	Remains well.
21	1861. Jan.	54	Married	Multilocular, about 20 lbs.	Remains well.
22	March	22	Unmarried	About 16 lbs., multilocular	Remains well.
23	April	55	Married	Semi-solid, about 20 lbs.	Remains well.
24	April	42	Married	Very large multilocular cyst	Died twenty-four hours after.
25	June	34	Unmarried	Multilocular, 55 lbs.	Died four days after.
26	July	31	Married	Multilocular, more than 50 lbs.	Died two days after.
27	Aug.	27	Unmarried	Nearly single cyst. 44 lbs., of fluid	Remains well.
28	Aug.	35	Unmarried	Tapped twice. Multilocular, about 17 lbs.	Remains well.
29	Oct.	54	Married	Ascitic fluid round large colloid cyst, about 35 lbs.	Died forty-seven hours after.
30	Dec.	50	Unmarried	Tapped nine times. Multilocular, 40 lbs.	Remains well.
31	Dec.	46	Married	Fibrous tumour, 27 lbs.	Died twelve days after.
32	1862. Jan.	30	Unmarried	Multilocular	Died thirty hours after.
33	Jan.	47	Married	Multilocular, about 30 lbs.	Died fifth day.
34	Jan.	32	Married	Multilocular, very large	Died third day.
35	May	30	Unmarried	Multilocular	Died, thirteenth day, of tetanus.

36	1862. May	41	Married	Very large multilocular	Remains well.
37	June	35	Married	Large semi-solid tumour	Remains well.
38	June	28	Unmarried	Multilocular. Had been injected with iodine	Remains well.
39	June	25	Married	Large multilocular	Remains well.
40	July	20	Unmarried	Over 40 lbs., multilocular	Remains well.
41	July	41	Unmarried	Large semi-solid tumour	Remains well.
42	Sept.	49	Unmarried	Adenoid tumour	Remains well.
43	Oct.	24	Unmarried	Very small cyst, 7 lbs.	Remains well.
44	Oct.	56	Married	Large multilocular	Remains well.
45	Oct.	43	Unmarried	Large semi-solid	Died forty hours after.
46	Nov.	32	Unmarried	Cystic and adenoid	Recovered.
47	Nov.	23	Unmarried	Multilocular cyst	Convalescent.
48	Nov.	50	Married	Large multilocular	Convalescent.
49	Nov.	23	Unmarried	Large multilocular	Convalescent.
50	Nov.	17	Unmarried	Large multilocular	Convalescent.

Series II.—*Three Cases in which Ovariotomy was commenced, but not completed.*

No.	Date.	Age.	Condition.	History, &c.	Result.
1	1857. Dec.	28	Unmarried	Incision made, and intestines found anterior to tumour	Recovered from incision, and died 4 months after from spontaneous rupture of cyst into peritoneal cavity.
2	1860. Oct.	21	Unmarried	Abandoned, from extent and closeness of parietal adhesions	Recovered, and was tapped seven times afterwards; she died, a year after.
3	1862. Oct.	46	Married	Abandoned from connections around brim of pelvis, and to uterus and bladder	Partially recovered, but died three weeks afterwards of rupture of a cyst into peritoneal cavity.

SERIES III.—*Three Cases in which an Exploratory Incision was made.*

No.	Date.	Age.	Condition.	History, &c.	Result.
1	1860. Sept.	38	Married	Found the extensive attachments suspected, and simply tapped	More relieved than by tapping, but died of natural progress of disease after 15 days.
2	1861. Oct.	30	Unmarried	Found the close attachments to bladder which had been suspected before the incision was made	Recovered; has been tapped twice since.
3	1862. Feb.	37	Married	Found very firm parietal adhesions, as suspected. Tapped several cysts	Died a week afterwards from inflammation of lining membrane of cyst.

I have not included in this table one case in which great doubt was felt before the operation whether the moveable solid tumour recognised was ovarian, or a fibrous outgrowth from the uterus, and which proved to be the latter, because I was able to remove the tumour as I anticipated; and I hope, on some future occasion, to bring this and other cases of uterine tumour before the Society. But as this was the only case out of fifty-seven in which I opened the abdomen in any other than an ovarian tumour, it is evident that objections to the operation, founded upon imaginary difficulties of diagnosis, cannot any longer be seriously entertained. If, indeed, it were possible that a skilful surgeon could open the abdomen with the intention of removing an ovarian tumour—or in the belief that an ovarian tumour was present, after careful examination of a patient—and yet in one in ten, or one in fifteen cases, no such tumour existed, I should at once confess that this was a very strong argument against admitting the principle of the operation. But as no such mistake was made in any one of the cases now before the Society, nor in any one of the numerous cases in which I have simply tapped, or have injected iodine, it must be considered as sufficiently proved that the alleged difficulty of diagnosis is greatly exaggerated.

Another error, which, if uncorrected, would retard the progress of the operation, is a belief that it is one of so very grave a nature, and so uncertain in its results, that no surgeon can do more than make a rough guess at the probable issue in any given case. Because a very favorable case has sometimes terminated unfavorably, while a very desperate one has occasionally succeeded, it has not only been argued that the rules which guide us in estimating the risk of other serious operations do not apply in the case of ovariotomy; but it has been gravely maintained that this operation stands alone, and that the more the general health of the patient has been broken down by the disease, the more the peritoneum has been changed from its normal state by distension and adhesions, the greater is the probability of success. This pernicious error, which has led to

many promising cases being deferred until too late, or until what would have been a very simple operation has become a very complicated and difficult one, I am most anxious to correct. On looking over the above table, I am reminded of some very hopeless cases of large tumours, with firm adhesions, which I removed successfully from women who were very much broken down by the disease; and I see one case which was in every respect most favorable, but in which death occurred from tetanus. I see another which was fatal, but which, in all probability, would have been successful, had I known at the time of the operation all that I have since learned and endeavoured to teach, as to the mode of securing the pedicle, of closing the wound, and of restricting the use of opium. But classing cases of this kind among those exceptional occurrences which every surgeon who has much experience of capital operations occasionally meets with, and accepts as lessons to be cautious in prognosis, when so many unforeseen circumstances may arise to disturb the most careful calculations, I can state most distinctly that ovariotomy does not differ from other serious operations with regard to the rule that the better the general health of the patient, and the smaller the injury that is done in the removal of any diseased part, the greater is the probability of success.

Then as to the condition in which a patient is placed before and after operation, it is to be observed that when I began to perform ovariotomy it was held that a patient should undergo a long course of preparatory treatment, and that during and after the operation she should be kept in a close room filled with hot vapour. A state of copious perspiration was encouraged, and opium was given in such large and frequent doses, that some patients who died were not killed by ovariotomy, but were poisoned by opium. In my earlier cases, I followed the traditional routine; but I soon found that in some cases no opium need be given, and that when it was wanted to relieve pain, very moderate doses, repeated according to the continuance or recurrence of pain, were quite sufficient. Brandy, wine, and strong

beef-tea were also given from the first by some operators, while one kept his patients on the most meagre diet. I avoided both extremes, finding that in most cases little or no stimulus was needed during the first two or three days, and that the patients did much better on barley-water, gruel, or arrowroot, the quantity being regulated entirely by the appetite; animal food not being given until the fourth or fifth day, and stimulants being administered or not in accordance with the state of the pulse and the general condition of the patient. I also found that the sickness and faintness which were supposed to be the proofs that large quantities of stimulants are required, depended in a great measure on the practice of keeping the patients in an atmosphere artificially heated and moistened, and that when the room was kept warm by a large open fire, and fresh air was admitted freely by an open window—the patients being protected from currents of cold air by a screen and a full supply of bed-clothes—the condition after the operation differed from the healthy state much less than under the former plan of treatment. I have known patients declare that the night after the operation was the best they had had for weeks, and some have recovered without taking a single dose of any sort of medicine. It may be seen that of my last fifteen cases, fourteen have recovered or are convalescent. I attribute this increasing success to the fact that in all these cases, even in winter, a window has been kept open night and day (except when the patient was uncovered for dressing), while the room has been warmed by an open fire kept constantly burning.

I have trespassed so long upon the attention of the Society that I cannot at present enter upon the consideration of the mode of performing the operation, the instruments found most useful, or the best mode of meeting the various difficulties which may embarrass the surgeon in complicated cases. And these are all matters of detail, well deserving of careful study it is true, but still of far inferior importance to the question whether the principle of the operation is to be acknowledged by this Society. I shall, therefore, con-

clude by referring to the condition of the patients who have recovered as a proof that when they escape the immediate dangers of the operation, their health becomes remarkably good.

It may be seen by reference to the table that one patient who recovered died ten months afterwards of cancer of the peritoneum, and one two years afterwards of hemiplegia; but all the others have maintained a condition of vigorous health. Last May, M. Nélaton saw several patients upon whom I had operated in 1859, 1860, and 1861. He examined them very carefully, and was very deeply impressed by the perfect health they enjoyed. Menstruation has returned in many cases with perfect regularity, and one patient bore a healthy child afterwards. As many of these women, now young and healthy, who are fulfilling their various duties in domestic service, or in the home life of single ladies, or as wives and mothers, and who are likely to continue to do so for many years, would in all probability have died a miserable death, months or years ago, had not their lives been saved by ovariotomy—it is for the Fellows of this Society to determine whether an operation which has led to such results is still to be stigmatised as unjustifiable —whether they who perform it are necessarily open to the reproach that they do so rather for their own selfish purposes than for the good of their patients—whether they who, in the face of evidence sufficient to convince any unprejudiced mind, continue to withhold from their patients a tried and approved means of curing a disease otherwise incurable and certainly fatal, are not open to a still more serious reproach —whether it does not become us (as men of science who practice our art not for our own advantage only, but with the earnest desire to do the very best that can be done for those who are confided to our care, or who trust in our knowledge, our skill, and our honour) no longer to oppose or condemn this operation, but rather to study its past history—to regard it with pride, as an offspring of British genius, cultivated by British industry—and to aid its future progress by perfecting our means of diagnosis; by ascertaining the con-

ditions which should in any case encourage us to recommend the operation, or should deter us from doing so; and by investigating the avoidable or removable causes of excessive mortality, reduce it to that comparatively low proportion to which I feel confident it may be and will be reduced, and thus render ovariotomy in each coming year more honorable to British Surgery, and more useful to Mankind.